Question: What is the effect of different oils on the temperature of the piston in a Nitro-Motor?

Hypothesis: If a motor is run with different oils, the temperature at the piston will be lowest with the olive oil.

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| *Trials* | *Table 1. Temperature (0C) at piston* | | | | |
|  | *10W30* | *10W-30 with PFTEs* | *PFTEs* | *5W30* | *Olive Oil* |
| *1* |  |  |  |  |  |
| *2* |  |  |  |  |  |
| *3* |  |  |  |  |  |
| *4* |  |  |  |  |  |
| *Table 2: Central Tendency and Variation Temperature (0C) at piston N = 4* | | | | | |
|  | *10W30* | *10W-30 with PFTEs* | *PFTEs* | *5W30* | *Olive Oil* |
| *Mean* |  |  |  |  |  |
| *Median* |  |  |  |  |  |
| *Mode* |  |  |  |  |  |
| *Range* |  |  |  |  |  |

Note to students:

Table 2 contains data that will generate a graph according to the type of data. In this case, the independent variable is discrete and the dependent variable is continuous, so this data would generate a bar graph of the mean temperature (y-axis) vs type of oil (x-axis).

The range should be indicated on each bar.

The results section contains an extensive paragraph describing in words the central tendency and variation for each type of oil.

The conclusion section points out inconsistencies in the data. Perhaps one type of oil had the lowest temperature, but a large range (lack of precision). The inconsistency should be explained with a scientific commentary.